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In re the Application of

Jeffrey P. Szmanda

Serial No.: 09/982,640

Filed: 10/18/2001

For: A Method of Retrieving

Advertising Information and Use of

the Method

Group Art Unit: 2171

Examiner: Cam-Linh Nguyen

Response to First Office Action

Assistant Commissioner for Patents

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In the matter of the above entitled application, Applicant respectfully submits a reply to the first office action. Claims 1-42 and 44 are pending in this application. Claim 43 was canceled in a preliminary amendment.

Numberings in this response correspond to the numberings in Examiner's Detailed Action.

1. Examiner objects to the disclosure because the disclosure "does not provide information in [on] 'first and second search engine' as claimed in claim 11-38." The following are respectfully pointed out:

(a) Paragraphs 29 and 30 of the specification refer to both a first and second search engine. (b) Paragraph 45 refers to Figures 3 and 4 wherein "results are input to a second search phase represented in

Figure 4." (c) Paragraph 46 also refers to "a second search phase when the output from the search in Fig. 3 does not produce a unique result." (d) Paragraph 34 refers to "the search engines of this invention" in the plural, indicating that there is more than one search engine. (e) Figure 4 depicts a rudimentary search engine that searches the "redacted ad list buffer" in item 15. In addition, Figure 5 depicts a rudimentary search engine that searches the "redacted ad list buffer in" item 15, based on an expanded keyword list generated in item 24. It is respectfully argued that applicant has described adequately the first and second search engines of claims 11-38 by the above references in the specifications and the drawings It is further argued, respectfully, that the depiction of rudimentary second search engines in Figures 4 and 5 satisfies inherently the written description requirement in view of the plural reference to "search engines" in paragraph 34 and the "second search phase" described in paragraphs 45 and 46. In the interest of furthering prosecution it is proposed that the term "second search phase" in the specification should be changed to "second search engine" so that the terminology is in accord with that in paragraphs 29 and 30. In view of the above, it is believed that the introduction of this amendment would not constitute new matter and therefore should be entered. An amendment to the specification appears as Appendix 1 to this response.

2. Examiner points out that claims 1-42 and 44 were not submitted originally on a separate sheet. As for claims 1-43 (claim 43 now canceled) this objection was addressed by Applicant in a response to the preliminary examination phase on the form, dated 20 January, 2002

wherein Applicant submitted a clean copy of claims 1-43 along with the required copy of the "NOTICE TO FILE CORRECTED APPLICATION PAPERS." As to claim 44, Applicant submitted claim 44 on a separate sheet in a preliminary amendment dated 8 June, 2002 and again at the request of Examiner in a response dated 31 January, 2004. It is believed that the requirement of 37 CFR \$1.75(h) has been met. However, Applicant submits herewith, a clean copy of claims as amended in Appendix 2.

- 3. The drawings of this application are objected to under 37 CFR §1.83(a) for not showing every feature of the invention as specified in the claims. As noted above in the response to Objection 1, Figure 4 contains a block diagram of a rudimentary search engine representing the first search engine. As noted in the response to objection 1, Figure 5 contains a rudimentary block diagram representing a second search engine. In response to Examiner's objection, Figures 4 and 5 are amended to contain a block around the rudimentary first and second search engines already represented therein and the appropriate reference is inserted into the specification in paragraphs 52 and 53. Amendments appear in Appendix 3. In view of the response to Objection 1 and the depictions already in Figures 4 and 5, it is submitted respectfully that these amendments introduce no new matter and should be entered.
- 4. Examiner rejected claims based on 35 USC §112. Rejections are responded to according to the numbering of Examiner's Detailed Action.
- 5. Claims 2, 11-38 are rejected under 35 USC § 112, first paragraph as failing to comply with the written description requirement. In particular,

- Claim 2 includes the phrase "the user experienced said advertisement previously." Examiner argues that Applicant has failed to provide a way to know that the user experienced the advertisement previously. However, it is respectfully pointed out that the application contains numerous ways in which the user experiences an advertisement whether or not s/he recalls the advertisement perfectly. Indeed, it is this experience with the advertisement that enables the user to perform the search described in Claim 2. Specifically, Example 1 depicts a user who has an incomplete experience with the advertisement but is nevertheless able to perform the search based on fragmentary recall of that experience. Further, Examiner's attention is drawn to Figure 7, wherein the advertisement must be recalled with sufficient specificity to enable retrieval of the contact information. Such retrieval would not have been possible if the user had not experienced the advertisement previously.
- Claims 11-38 are rejected because they refer to first and second search engines which Examiner argues are not supported in the disclosure. In Applicant's response to Objections to the Specification in item 1, Applicant proposed that that the term "second search phase" in the specification should be changed to "second search engine" as shown in Appendix 1 so that the terminology is in accord with that in paragraphs 29 and 30.

  Further, Figures 4 and 5 are amended to contain a block around the rudimentary first and second search engines already represented therein and the appropriate reference is inserted

into the specification in paragraphs 52 and 53. These amendments are included in Appendix 2 and should obviate the above rejection. Examiner states that "it is assumed that the applicant uses two different search engines to search the same database." While Applicant is thankful for Examiner's interest in compact prosecution, it is respectfully pointed out that, while two different search engines may be used, the first search engine searches the ad list buffer as depicted in Figure 3(5) while the second search engine searches a redacted ad list buffer as depicted in Figure 4(15). Because the contents of the redacted ad list buffer represent a subset of the contents of the original ad list buffer, the two databases need not be the same as assumed by Examiner.

- 6. Examiner rejected claims based on anticipation under 35 USC \$102(b) by Skillen et al. (U.S. 6,098,065). Rejections are responded to according to the numbering of Examiner's Detailed Action.
- 7. Claims 1-42 and 44 were rejected by Examiner under 35 USC \$102(b)as being anticipated by Skillen et al. (U.S. 6,098,065).
- As per claim 1, Examiner argues that Skillen "discloses a method of supplying advertisement information to a user searching for information" and citing alleged equivalences as in the following table (Examiner's citations are given for reference):

		Skillen Reference as cited by	
	Present Application	Examiner	
Element 1	"receiving from the user, a series of search rules comprising facts about an advertisement;"	(col. 4 lines 5-6) "searches based on subject, strings, Boolean text, etc. Such input search arguments may be received from an end user"	
Element 2	"accessing a database comprising details of a plurality of advertisements;"	(col. 4, lines 31-40) "The search engine 16, having carried out a traditional search of Internet related information in the contextual data 22, passes the argument and results of its search to the associative search engine 18 which then looks for a match in the product data 24 of the database 20. The associative search engine 1 may determine a logical product fit to the initial search argument, or it may create a logical tree analysis of possible product fits and selects a probable best product for an advertisement window to be displayed with the search results.	
Element 3	"using a search engine to apply said search rules to said database;"	(Fig. 1 element 16, 18 [not shown here] col. 4 lines 31-45) Matter from Examiner's citation regarding Element 2 plus "The associative engine 18 passes the data of the selected product to the search engine 16 which in turn provides the results of the search against the given argument together with the initial product advertisement to the device 12 for displaying to the end user."	
Element 4	"reporting, to the user, results comprising a subset of the contents of said database."	(col. 4 lines 46-48) "The end user refines his or her search by either clicking on a displayed result or refining their search through additional arguments or search criteria.	

The description cited by Examiner is specifically of an "advertising machine" (col. 3 line 66) comprising "a database search engine 16 and an associative

search engine 18 which may access a database 20 having contextual data 22 and product data 24." (column 3 line 67 - column 4 lines 1-2, emphasis mine) As for Element 1, Examiner's corresponding citation does not have a specific reference to what information the user actually supplies to the search engine. Although it is clear that the user is searching for something in Examiner's citation, it is not clear what it is. As for Element 2, the contextual database 22, with which the first database search engine interacts, "typically contains information relating to the Internet, for instance, keywords associated with respective WWW site locations." (col. 4, lines 11-13 [emphasis mine]) It does not appear that the contextual database contains "details comprising a plurality of advertisements" as specified in Claim 1, Element 2 of the present application. Examiner's citation further provides a second search engine, described as an "associative search engine" (col. 4 line 14), not specified in Claim 1 of the present application, which receives the results of the first search engine and searches a second database called a "product database," (col. 4 line 19) for "product data within the product database 24." (col. 4 line 19) In the Skillen reference, a "product database" may, for example, contain product specifications or other information related to a product being sought but the Examiner's citation and the detailed description do not contain any mention of "details of a plurality of advertisements;" or the equivalent as specified in Element 2 of Claim 1. It is respectfully pointed out that advertisements may contain information other than "product data." Indeed, some advertisements may contain no product data (See paragraph 7 of the current application) and would therefore not be contained in the contextual or product databases of the Skillen reference but would be contained in the database of the present

application. Therefore, the contextual and product databases in the Skillen reference, separately or taken together, do not contain "details of a plurality of advertisements" as recited in Element 2 of Claim 1. As for Element 3 of Claim 1, the antecedent basis of "said search rules" is "search rules comprising facts about an advertisement" recited in Element 1 while "said database" has antecedent basis in Element 2, wherein is recited "a database comprising details of a plurality of advertisements." Neither limitation is found in Examiner's citation. Element 4 again recites "said database" with the same antecedent basis as supra. This limitation is not found anywhere in Examiner's citation. Based on the above, it is respectfully submitted that Examiner has not met the burden of showing that every element of Claim 1 is anticipated by the written description in the Skillen reference, that the rejection of claim 1 is, therefore, improper and that Claim 1 is in condition for allowance.

experienced said advertisement previously," Examiner points out that the Skillen reference describes a user seeking "desired information" (col. 1 lines 42-43) and argues that the user "must experience with the advertisement or must see/know and show an interested in it in order to make the request." Applicant respectfully interprets Examiner's statement to mean that (1) the user must have experienced the advertisement or (2) must have seen or know the product in order to make the request. However, the Skillen reference is silent on any aspect of the user's prior experience regarding advertisements that s/he may or may not have experienced before performing the search and Examiner cites no such example. Indeed, the object of the "advertising"

machine" of the Skillen reference appears to be the generation of an advertisement on the user interface 12 after the user has performed his or her search involving a product database. Since Examiner has presented no example from the Skillen reference in which the user had prior experience with an advertisement, it is respectfully submitted that a rejection of claims 2, 7, 12, 19, 26, 33 based on anticipation by Skillen is improper. In the interest of compact prosecution, it is alternatively supposed by Applicant that Examiner is possibly making an argument based on anticipation by inherency. If such is the case, attention is drawn to MPEP \$2112. "In relying on the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) A user search based on simply knowing about the product without having experienced an advertisement may be generally possible within the scope of the Skillen reference, since an apparent object of the advertising machine described therein is to generate an advertisement after the search is performed as noted supra. However, it is respectfully submitted that the Skillen reference does not provide a basis for the limitation "the user experienced said advertisement previously" and such a basis is not cited by Examiner. Since no such basis in fact or technical reasoning that the allegedly inherent characteristic necessarily flowing from the teachings of the Skillen reference has been provided, it is respectfully submitted that a rejection of claims 2, 7, 12, 19, 26, 33

based on anticipation by inherency in the Skillen reference is improper.

- As per claims 3, 8, 13, 20, 27, 34, claim 3 depends from claim 1, claim 8 depends from claim 6 which, in turn, depends from claim 1, claim 13 depends from claim 11, claim 20 depends from claim 18 which, in turn, depends from claim 11, claim 27 depends from claim 25, claim 34 depends from claim 32 which, in turn, depends from claim 25. Examiner notes correctly that the Internet is specified as a data network in the Skillen reference. (Fig. 1, element 14, col. 3 lines 53-55). It is therefore acknowledged that the allowability or rejection of the aforesaid claims in this section based on anticipation by the Skillen reference will stand or fall on the allowability of the claims from which they depend.
- As per claims 4, 9, 14-16, 21-23, 28-30, 35-37, 41, 43, claim 4 depends from claim 1, claim 9 depends from claim 6 which, in turn, depends from claim 1, claims 14-16 depend from claim 11, claims 21-23 depend from claim 18, which, in turn, depends from claim 11, claims 28-30 depend from claim 25, claims 35-37 depend from claim 32, claim 41 depends from claim 39, claim 43 is not pending in this application, however, in the interest of compact prosecution, it is supposed that Examiner is referring to claim 44, submitted in a preliminary amendment to correct a typographical error, which depends from claim 42. Examiner asserts that the aforesaid claims in this section all contain the language "...the algorithm of said search engine is selected from a group consisting of deductive reasoning, fuzzy logic and abductive reasoning." Examiner rejects the claims in this section based on the

Skillen reference, col. 4 lines 14-25, which discusses the second search engine, also denoted as the "associative search engine." Specifically with respect to claims 16, 23, 30 and 37, the Markush language "...the algorithm of said search engine is selected from a group consisting of deductive reasoning, fuzzy logic and abductive reasoning" is not recited in these claims, a prima facie case of anticipation, has, therefore not been made. It is respectfully submitted that rejection of Claims 16, 23, 30 and 37 is, therefore, improper. Specifically with respect to claims 4, 9, 14-15, 21-22, 28-29, 35-36, 41 and 44, Examiner correctly points out that that the claims contain the language "...the algorithm of said search engine is selected from a group consisting of deductive reasoning, fuzzy logic and abductive reasoning" and that the cited reference refers to "fuzzy logic." However, the Markush groups in the latter cited claims of this section recite "deductive reasoning" and "abductive reasoning" in addition to "fuzzy logic" as search engine algorithms. The Skillen reference is silent with regard to "deductive reasoning" or "abductive reasoning" and therefore cannot support a prima facie case of anticipation with respect to these claim limitations. Rejection of the matter that does not include "fuzzy logic" based on anticipation by the Skillen reference is, therefore, improper. On the other hand, it is acknowledged by Applicant that the claim limitation "fuzzy logic" is contained in Examiner's citation of the Skillen reference and specifically with respect to the "fuzzy logic" limitation in the Markush groups recited in claims 4, 9, 14-15, 21-22, 28-29, 35-36, 41 and 44, the allowability of such language will stand or fall on the

allowability or rejection based on anticipation by Skillen of the claims from which these claims depend. Finally, rejection of Claims 16, 23, 30 and 37 is improper under this section because these claims do not contain the Markush language cited by the Examiner.

As per claims 5, 10, 17, 24, 31, 38, claim 5 depends from claim 1, claim 10 depends from claim 6 which, in turn, depends from claim 1, claim 17 depends from claim 11, claim 24 depends from claim 18 which, in turn, depends from claim 11, claim 31 depends from claim 25, claim 38 depends from claim 32 which, in turn, depends from claim 25. Examiner notes the language of the claims "said advertisement information comprises contact information" and notes that the Skillen reference (col. 4, line 64 - col. 5, line 6) discloses "Once the end user clicks on (selects) the advertisement displayed on the device 12, an appropriate message is sent to the advertising machine 10 and, in particular, to the associative search engine 18 which may automatically connect the end user to the seller of the product, for instance, by forwarding the browser of the end user device 12 to the WWW site address of the seller. In the product data 24 for this seller, the associative search engine may record that this transaction occurred, in order that a toll for bringing a buyer and seller together may be extracted." Assuming, without prejudice, that Skillen's reference to "the WWW site address of the seller" is sufficient to cover the range of contact information embodied in the claims of this section, it is acknowledged that the allowability or rejection of the aforesaid claims in this section based on anticipation by the Skillen reference will stand or fall on the allowability of the claims from which they depend.

However, Applicant reserves the right to amend the claims of this section to include other contact information in a manner supported by the original specification, should such amendment become necessary.

Notwithstanding the foregoing, it is expressly not applicant's intention to surrender or disclaim any matter in this section.

As per claims 6, 18, 32, claim 6 depends from claim 1, claim 18 depends from claim 11 and claim 32 depends from claim 25. Examiner cites Figure 1 of the Skillen reference and argues that the phrase "user is a customer" is considered nonfunctional language as described in MPEP \$2106 (VI), which refers generally to the subject of nonfunctional language and specifically to whether "the difference between the prior art and the claimed invention is limited to descriptive material stored on or employed by a machine." Examiner argues that "...the end user may be any type of user." While it is true that the end user may be any type of user, the result obtained from the search will depend on the type of user. Indeed, the inputs from an advertiser doing demographic research, as claimed in claim 40, will likely give a different search result from that initiated by a customer trying to find an advertisement of which s/he has incomplete recall, as illustrated in Example 1 of the present application. It is respectfully argued by Applicant that such a difference in search result renders the language entirely functional. Further, Applicant takes notice that Examiner's rejection of claim 40 is not based on the ground that the phrase "said user is an advertiser" is nonfunctional language. It is unclear how the assertion of nonfunctional language can be made when the claim recites "user is a customer" and not made when the claim recites "user is an

advertiser." Finally, Examiner's attention is drawn respectfully to MPEP \$2106 (VII), which reads, "Once Office personnel have concluded the above analyses of the claimed invention under all the statutory provisions, including 35 U.S.C. 101, 112, 102 and 103, they should review all the proposed rejections and their bases to confirm their correctness. Only then should any rejection be imposed in an Office action. The Office action should clearly communicate the findings, conclusions and reasons which support them." Applicant admits to being confused about whether rejection of the aforesaid claims is based on anticipation by the Skillen reference under 35USC §102(b), as stated in the main heading of this section, or whether Examiner is presenting a case for obviousness under 35USC §103 of the aforesaid claims in view of the Skillen reference based on Examiner's statement that "Nonfunctional descriptive material ... cannot render nonobvious an invention that would otherwise have been obvious." If Examiner is rejecting based on obviousness in view of the Skillen reference, a citation of the suggestion or motivation for modifying the reference must be made under MPEP \$2143. Such was not proffered here. The requirement of a clear communication of the findings, conclusions and reasons which support rejection of the aforesaid claims as outlined in MPEP \$2106(VII) and a clear citation of the specific statutory basis of the rejection (whether, for example, Examiner is rejecting based on obviousness or anticipation) would appear to be necessary parts of any prima facie case for obviousness or anticipation. Accordingly, based on the foregoing, it is therefore submitted, respectfully, that no

prima facie case for anticipation has been made for claims 6, 18 and 32.

• As per claims 11 and 25, Examiner sets forth the same limitations as those for Elements 1-4 of Claim 1. In addition, Examiner cites col. 5 lines 7-17, col. 6 lines 4-12 and the user profile database in fig. 2 in further argument that Element 1 of claims 11 and 25 is taught in the Skillen reference. Further, Examiner notes correctly that the Skillen reference uses a "first and second search engine" and cites fig. 1 element 16 and 18 along with col. 4 lines 49-55. The original and additional citations of the Examiner are delineated along with the claim elements of Claims 11 and 25 in the following table.

Element 1	
querying the user to obtain one or more search rules comprising facts about an advertisement;	Szmanda Claim 11
querying the user to obtain one or more search rules comprising facts about an advertisement;	Szmanda Claim 25
based on subject, strings, Boolean text, etc. Such input search arguments may be received from an end user" (col.5 lines 7-17) "Moreover, user profile data may be maintained on end user device 12 and accessed by the associative search engine 18. The profile data contains, for example, end user preferences and previous search arguments which may be used to augment the individual search arguments received with the search request to select a best fit product advertisement. The associative search engine 18 retrieves and updates the profile data on the device 12, using appropriate messages exchanged over the communications link 14. For example, the search arguments from the current search session may be added to the user profile data. (col. 6 lines 4-12) "advertisement window on the search results. In this case, the associative search engine 40 also can utilize the maintained profile on the end user from past search sessions and/or historical data gathered on their buying habits, in the product selection processing. The associative search engine corrélates the user's identity	Skillen Reference examiner's citation

Element 4 receiving from more keywords;	using a first search end apply said search rules database to obtain resulting a first subsecontents of said databases	accessing a dat element 2 details of a pl advertisements;	
om the user one or	first search engine to id search rules to said to obtain results ng a first subset of the of said database;	accessing a database comprising <b>details of a plurality of</b> <b>advertisements</b> ;	
receiving, from the user, a first list of keywords;	Using a first search engine to apply said search rules to said database to obtain a plurality of results comprising a first subset of the contents of said database;	accessing a database comprising details of a plurality of advertisements;	
			to data in the user profile database 48 which it maintains and updates with data (e.g., search argument received with search request) from the current search session."

Element 9	Element 8	Element 7	Element 6	Element 5
			and reporting, to the user, results comprising a second subset of the contents of said database, wherein said second subset is smaller than said first subset.	using said keywords and a second search engine to query said first subset;
and reporting, to the user, results comprising a second subset of the contents of said database, wherein said second subset is smaller than said first subset.	Using said second list and a second search engine to query said first subset;	generating a second list of keywords, said second list comprising keywords or phrases synonymously related to one or more keywords or phrases in said first list;		
16 again wor) ing refined da In the case of the associate of the probable of the probable of the generate of the case of the probable of the case of the probable of the case	here] col. 4 line e associative sead the database sea	[In the interest of compact prosecution, Applicant supposes that Examiner wishes to cite the same passage as above for Elements 7-9 of Claim 25.]  [Fig. 1 element 16, 18 [not		(Fig. 1 element 16, 18 [not shown here] col. 4 lines 49-55) The associative search engine

With respect to Claim 11, Element 1, Applicant incorporates the same argument regarding Element 1 of Claim 1 here by reference and reiterates that the description cited by Examiner is specifically of an "advertising machine" (col. 3 line 66) comprising "a database search engine 16 and an associative search engine 18 which may access a database 20 having contextual data 22 and product data 24." (column 3 line 67 and column 4 lines 1-2, emphasis mine) As for Element 1, Examiner's corresponding citation does not have a specific reference to what information the user actually supplies to the search engine. Although it is clear that the user is searching for something in Examiner's citation, it is not clear what it is. In the original and additional material cited by the examiner, there is no reference to "search rules comprising facts about an advertisement," as recited in claims 11 and 25. Indeed, the additional material merely recites "user profile data" and a "user profile database," neither of which corresponds to "search rules comprising facts about an advertisement," as recited in Elements 1 of Claims 11 and 25. Elements 1 of claims 11 and 25 do not appear to be taught explicitly or implicitly in Examiner's citation from the Skillen reference. With respect to Elements 2 and 3 of Claims 11 and 25, the same arguments regarding Elements 2 and 3 of claim 1 are incorporated here by reference. Nowhere in Examiner's cited material does there appear "details of a plurality of advertisements" or the equivalent as recited in Elements 2 of Claims 11 and 25 and cited by antecedent basis in Elements 3 of claims 11 and 25. As for Elements 4 of Claims 11 and 25, these appear to be taught in the Skillen reference as cited by Examiner. As for Claim 11, Elements 5 and 6, neither of the databases cited by Examiner contains "details of a plurality of advertisements" as recited in Claim 11, some of which appear in "said first subset" and in "said second subset." As for Claim 25, Elements 7-9, the claim recites "said second list comprising keywords or phrases synonymously related to one or more keywords or phrases in said first

list." Examiner's citation from the Skillen reference discloses that the search engines 16 and 18 "work together" to refine the scope of the search using information from the "product database," 24 (col. 4 lines 49-55), and the "contextual database," 22. As noted supra, the product database contains "product data" and the contextual database 22 contains "information relating to the Internet, for instance, keywords associated with respective WWW site locations." It is not clear how the Skillen reference would generate a second set of "keywords or phrases synonymously related to one or more keywords or phrases in said first list," as recited in claim 25 in the way that the present application discloses, for example, in paragraph 37. Indeed, the generation of a second set of "keywords or phrases" as recited in Claim 25 and disclosed in paragraph 37 of the present application may tend to expand - rather than refine the scope of the search. The Skillen reference would, therefore, not provide sufficient written description and enablement about the generation of a second set of "keywords or phrases synonymously related to one or more keywords or phrases in said first list." Based on the foregoing, it cannot be concluded that the matter from the Skillen reference as cited by the Examiner has been shown to anticipate Claims 11 and 25. It is therefore submitted, respectfully, that no prima facie case for the rejection of claims 11 and 25 based on anticipation by the Skillen reference has been made.

As per Claims 39 and 42, Examiner cites the limitations of claim 1 as above and further cites col. 2 lines 44 - 49 of the Skillen reference as the equivalent of "search terms comprising words having targeted connotative significance to a particular demographic segment." The cited passage reads "In addition to the search criterion, as users interact with the advertising system, it will continue to compile preference data (e.g. a list of keywords) for each user. All preferences, for example, can be left in a type of default mode or even presented to the user for him/her to edit and re-prioritize in

order to look for diversity or alternatives. The system can detect exceptions and contradictions so that the end user can be shown immediately that some of the options would violate natural tendencies." The cited matter in the Skillen reference discloses a system that compiles "preference data ... for each user" [emphasis mine]. Such data are not the same as those used in demographic research in which one studies whole populations of individuals — not single users — who have certain commonalities. As such the cited matter from the Skillen reference cannot be used in a prima facie case for anticipation because it does not disclose the same subject matter as is contained in Claims 39 and 42. For the sake of brevity, Applicant further incorporates the discussion regarding the limitations of Claim 1, supra, by reference. It is believed that the incorporated arguments further obviate the rejection. Based on the foregoing, it cannot be concluded that the matter from the Skillen reference, as cited by the Examiner, has been shown to anticipate Claims 39 and 42.

As per claim 40, Examiner cites the Skillen reference, col. 5 lines 3 - 6 as the equivalent of "said user is an advertiser." Claim 40 depends from Claim 39. The cited matter from the Skillen reference reads as follows: "...12 to the WWW site address of the seller. In the product data 24 for this seller, the associative search engine may record that this transaction occurred, in order that a toll for bringing a buyer and seller together may be extracted." It is acknowledged that the "advertiser" as recited in the claim may be a "seller." Alternatively, the advertiser may be an agent of the seller, such as an advertising agency. To the extent that the advertiser is strictly the seller, it is acknowledged that Claim 40 will stand or fall with the claim from which it depends.

- Claims 1 10 and 39 43 are rejected by Examiner under 35 USC \$102(e) as being anticipated by Loeb et al (US 6,421,652). Rejections will be responded to in Examiner's order. Claim 43 has been canceled and is no longer pending in this application. However, in the interest of compact prosecution, it is assumed that the examiner intended to reject Claim 44, which was submitted in a preliminary amendment to correct a typographical error in Claim 43.
- As per Claim 1,
  - o Examiner cites the Loeb reference Fig. 8, element 820 and col. 9 lines 45-54 as corresponding to "receiving, from the user, a series of search rules comprising facts about an advertisement" in Claim 1. However, Element 820 of Figure 8 recites "Receive consumer professional information in response to universal questionnaire and determine appropriate magazine subscriptions." Further, the cited text (col. 9 lines 45-54) reads as follows: "Once consumers 125 have come into contact with the website provided by central controller 110, the central controller 110 transmits the universal questionnaire, receives certain consumer information in response to the universal questionnaire and determines the appropriate free trade publication subscription(s) the consumer 125 may receive (step 820). The universal questionnaire transmitted in step 820 is described in greater detail below, with reference to FIGS. 9, 10 and 11A-C. [¶]Upon completion of the universal questionnaire, the central..." (Emphasis mine) Consistent with the phrase "consumer professional information," supra, Loeb discloses that "[t]he fields whose data is retrieved directly from consumers answers to the universal questionnaire include the consumer name, consumer address and e-mail address, consumer profession,

consumer title, field of specialty, qualification date and personal identifier." (col. 7 lines 42-47). The details sought by the "universal questionnaire" of the Loeb reference relate to the personal and professional background of the user and are not "facts about an advertisement" as recited in Claim 1. Indeed, a search of the Loeb reference reveals that the word "advertisement" does not appear. In a second point Examiner argues that "a series of search rules" corresponds to "the responses to the plurality of questions from the user." However, in the Loeb reference, the questions are asked by the disclosed universal questionnaire - not the user. Is it possible that Examiner means "to the user?" In that case, such responses may correspond generally to "search rules" but in the Loeb reference, as noted supra, the questions posed by the universal questionnaire do not seek "facts about an advertisement" as recited in Claim 1, but data related to the consumer's "professional information." In a third point, Examiner cites col. 9 lines 12-19 which reads "...consumer database 354. As shown in FIG. 8, the first step comprises advertising to consumers 125 the availability of free trade publications (step 810). Such advertising can be provided in a number of ways, but the key aspect is introducing and providing the universal questionnaire to a wide variety of consumers.  $[\P]$ First, the free trade publication promotion may be advertised on credit card statements. Most consumers who are..." However, nothing in the universal questionnaire appears to seek "information about a particular magazine or trade publications that the user [is] interested in, and is advertised by a number of ways." Rather, as emphasized above, the universal questionnaire seeks "professional information" about the consumer - not any magazine.

- o Examiner cites the disclosure in col. 5 lines 40-48 as the equivalent of "accessing a database comprising details of a plurality of advertisements." However, while the paragraph cited by Examiner describes generally a system, based on a server and databases, the Loeb reference does not disclose that the databases comprises "details of a plurality of advertisements" as recited in Claim 1. Indeed the databases listed by Loeb in Figure 2 and the throughout the Loeb reference are the "Consumer Database," the "Magazine Database," the "Publisher Database" and the "Fulfillment House Database." The contents of the Consumer Database are exemplified in Figure 4 and comprise facts about consumers. Further, as Loeb notes, "Magazine database 356 contains information about each trade publication, including its publisher and fulfillment house. Publisher database 358 contains information relating to trade publication publishers, including which trade publications each publishes. Fulfillment house database 359 contains information relating to each fulfillment house, including which trade publications are distributed by each fulfillment house." (col. 7 lines 8-15) It is respectfully pointed out that none of the listed databases comprise "details of a plurality of advertisements" as recited in Claim 1.
  - Examiner cites Figure 8, element 830 and col. 9 lines 54-58 and alleges that the matter disclosed therein is the equivalent of "reporting, to the user, results comprising a subset of the contents of said database," wherein the antecedent basis of "said database" is "a database comprising details of a plurality of advertisements," as recited in Claim 1 of the present application. Figure 8, element 830 recites "Transmit potential choices for magazine subscription(s) to

consumer." Col. 9 lines 54-58 further recites "Upon completion of the universal questionnaire, the central controller 110 determines the appropriate trade publications that apply to consumer 125, and notifies consumer 125 that he may receive any or all of them at no charge (step 830). As noted earlier, certain trade publications that consumer..." The purpose of this database activity appears to be to select "trade publications" that are appropriate to the interests of the consumer. However, since none of the databases listed in the Loeb reference comprises "details of a plurality of advertisements," it would be impossible for the subsets of any of those databases to provide information about advertisements. Indeed, the result of the search conducted in the Loeb reference is the presentation of a list of "trade publications" in which the consumer may be interested. It is therefore pointed out, respectfully, that the matter cited in this section by Examiner does not disclose "reporting, to the user, results comprising a subset of the contents of said database," as recited in Claim 1 because the report in the Loeb reference does not contain information about advertisements.

A prima facie case for anticipation requires that all of the elements of the claimed invention be disclosed by a single reference. However, a detailed examination of the pertinent parts of the Loeb reference shows that none of the elements of Claim 1 is properly disclosed therein. It is therefore respectfully pointed out that rejection of Claim 1 as being anticipated by the Loeb reference is improper.

As per claims 2, 7, 12, 19, 26 and 33, it is not understood why Examiner rejects only Claims 1-10, 39-42 and 44 at the beginning of Section 9 and then cites claims not included in the original list. Indeed, Independent Claims

- 11 (from which Claims 12 and 19 depend) and 25 (from which Claims 26 and 33 depend) are not rejected in section 9. Applicant respectfully takes the position that Claims 12, 19, 26 and 33 are not properly rejected because they serve only to limit further the independent claims from which they depend which are not rejected in this section. Claim 2 depends from Claim 1 and Claim 7 depends from Claim 6 which, in turn, depends from Claim 1.
  - the equivalent of "the user experienced said advertisement previously."

    The cited matter of lines 18-19 reads: "First, the free trade publication promotion may be advertised on credit card statements. Most consumers who are..." The cited matter of lines 24-26 reads: "...business travelers. In addition to physical statements, the promotion may also be included as part of the credit card or airline website. Consumers who are attracted to the site will..." It is acknowledged that the user (equivalent to the consumer) experiences the advertisement for the trade publication. Accordingly, with respect to anticipation by Loeb, it is therefore acknowledged that Claims 2 and 7 will stand or fall with the claims from which they depend.
- As per claims 3, 8, 13, 20, 27 and 34, it is not understood why Examiner rejects only Claims 1-10, 39-42 and 44 at the beginning of Section 9 and then cites claims not included in the original list. Indeed, Independent Claims 11 (from which Claims 13 and 20 depend) and 25 (from which Claims 27 and 34 depend) are not rejected in section 9. Applicant respectfully takes the position that Claims 13, 20, 27 and 34 are not properly rejected because they serve only to limit further the independent claims from which they depend which are not rejected in this section. Claim 3 depends from Claim 1 and Claim 8 depends from Claim 6 which, in turn, depends from Claim 1.

- o Examiner cites the Loeb reference col. 4 lines 14-16 as being the same as "the data network comprises the internet." The cited matter of col. 4, lines 14-16 reads: "...consumer terminals 120. In one embodiment, the remote consumer terminal 120 can be the consumer's PC or internet access device. In another embodiment, the remote consumer..." It is acknowledged that Loeb discloses the Internet as being a possible data network. Accordingly, with respect to anticipation by Loeb, it is therefore acknowledged that Claims 3 and 8 will stand or fall with the claims from which they depend.
- As per claims 4, 9, 14-16, 21-23, 28-30, 35-37, 41 and 44, it is not understood why Examiner rejects only Claims 1-10, 39-42 and 44 at the beginning of Section 9 and then cites claims not included in the original list. Indeed, Independent Claims 11 (from which Claims 14-16 and 21-23 depend) and 25 (from which Claims 28-30 and 35-37 depend) are not rejected in section 9. Applicant respectfully takes the position that Claims 14-16, 21-23, 28-30, 35-37 are not properly rejected because they serve only to limit further the independent claims from which they depend which are not rejected in this section. Further, claims 16, 23, 30 and 37 are not properly rejected because they do not contain the Markush language cited infra by Examiner. Claim 4 depends from Claim 1 and Claim 9 depends from Claim 6 which, in turn, depends from Claim 1. Claim 41 depends from Claim 39 and Claim 44 depends from Claim 42.
  - o Examiner alleges that the disclosure of the Loeb reference in Figure 10 and col. 12, lines 2-6 discloses matter in the Markush language of Claims 14-15, 21-22, 28-29 and 35-36, to wit "the algorithm of said search engine is selected from a group consisting of deductive reasoning, fuzzy logic and abductive reasoning." It is alleged that

support for examiner's rejection is found in Figure 10 (not reproduced here) and in the above textual reference which reads "...consumer 125 (step 1010). Questions of the universal questionnaire are generated based on a complex set of algorithms and artificial intelligence. One example is a "virtual form" based on "if-then" logic which focuses certain trade publications to a consumer based on the answers provided." While the process of Figure 10 and col. 12, lines 2-6 appears to be deterministic, it is unclear to Applicant how the algorithm outlined therein is shown to be "selected from the group consisting of deductive reasoning, fuzzy logic and abductive reasoning." Given the apparently deterministic nature of the algorithm and the apparently complete information set used by the method disclosed by Loeb, one can eliminate fuzzy logic (which provides a simple way to arrive at a definite conclusion based upon vague, ambiquous, imprecise, noisy, or missing input information) and abductive reasoning (in which hypotheses are formed and evaluated usually based on incomplete information). However, it not clear how the remaining element of the Markush group, deductive reasoning (which uses a major premise and at least one minor premise to arrive at a definite conclusion), is disclosed by the Loeb reference. Indeed, Loeb discloses a "'virtual form' based on based on 'if-then' logic which focuses certain trade publications to a consumer based on the answers provided." This does not appear to be "deductive reasoning," as recited in the claims of this section. Nowhere in the Loeb reference are deductive reasoning, fuzzy logic or abductive reasoning disclosed by name. Given that there is no clear identification of any of the members of the Markush group in the above claims, applicant

respectfully submits that the prima facie case for anticipation by Loeb of Claims 4, 9, 41 and 44 has not been made and that rejection of these claims is improper. Further, it is respectfully submitted that rejection of claims 14-16, 21-23, 28-30 and 35-37 is improper because these claims serve to limit the scope of the claims from which they depend and the claims from which they depend are not rejected by Examiner as being anticipated under this section. Finally, it is respectfully submitted that claims 16, 23, 30 and 37 are not properly rejected because they do not contain the Markush language cited by Examiner's rejection.

- As per Claims 5, 10, 17, 24, 31 and 38, it is not understood why Examiner rejects only Claims 1-10, 39-42 and 44 at the beginning of Section 9 and then cites claims not included in the original list above. Indeed, Independent Claims 11 (from which Claims 17 and 24 depend) and 25 (from which Claims 31 and 38 depend) are not rejected in section 9. Applicant respectfully takes the position that Claims 17, 24, 31 and 38 are not properly rejected because they serve only to limit further the independent claims from which they depend which are not rejected in this section. Claim 5 depends from Claim 1 and Claim 10 depends from Claim 6 which, in turn, depends from Claim 1.
  - o Examiner cites the claim language "said advertisement information comprises contact information" and points out that Figures 5 and 6 and col. 8, lines 45-51 which reads "Publisher database 358 contains information about the trade publication publishers. FIG. 6 illustrates a sample record of publisher database 358. As shown in FIG. 6, publisher database 358 contains publisher records having fields corresponding to, for example, publisher ID, publisher name, publisher contact information and list of magazine ID's published. Like the data

in magazine database 356, data..." also provide contact information to the consumer. It is acknowledged that the Lobe reference discloses the release of contact information to the consumer. Accordingly, with respect to anticipation by Loeb, it is therefore acknowledged that Claims 5 and 10 will stand or fall with the claims from which they depend. Finally, it is respectfully submitted that rejection of claims 17, 24, 31 and 38, is improper because these claims serve to limit the scope of the claims from which they depend and the claims from which they depend are not rejected by Examiner as being anticipated under this section.

- As per claims 6, 18 and 32, it is not understood why Examiner rejects only Claims 1-10, 39-42 and 44 at the beginning of Section 9 and then cites claims not included in the original list. Indeed, Independent Claims 11 (from which Claims 18 depends) and 25 (from which Claims 32 depends) are not rejected in section 9. Applicant respectfully takes the position that Claims 18 and 32 are not properly rejected because they serve only to limit further the independent claims from which they depend which are not rejected in this section. Claim 6 depends from Claim 1.
  - o Examiner notes correctly that the "customer" of claim 6 can be identified with the "consumer," cited in Figure 1 of the Loeb reference. However, Applicant does not believe that the limitations of Claim 1 (from which Claim 6 depends) are disclosed in the Loeb reference. Further, Applicant respectfully submits that the rejection of Claim 6 is improper based on the same argument with respect to the Skillen reference, supra, p. 14, in that Examiner has not made clear whether the rejection is based on obviousness or anticipation and in that it is alleged that the language "user is a customer" is

nonfunctional language when, for example, the user will get different search results when acting as a customer or as an advertiser. The language "user is a customer" is, therefore entirely functional. Based on the above, it is submitted respectfully that Claim 6 is rejected improperly under this section. Finally, it is respectfully submitted that rejection of claims 18 and 32 is improper because these claims serve to limit the scope of the claims from which they depend and the claims from which they depend are not rejected by Examiner as being anticipated under this section.

As per claims 39 and 42, with all limitations as in Claim 1, Examiner compares the claim language of the present application, "search terms having targeted connotative significance to a particular demographic segment" as being the equivalent of matter contained in the Loeb reference, Figure 11C, which provides a questionnaire having questions such as: "What is your profession?" "As an Engineer, your title is?" and "As a research Engineer, your field of specialty is?" and the like. In addition, examiner cites col. 13, lines 23-28, which reads: "In one embodiment, shown in FIG. 11C, the consumer 125 is offered a set of possible answers to choose from. In another embodiment, the consumer may simply type in or speak his answers without the need for a group of choices, and the central controller 110 determines the next question or set of questions based on each specialized answer." However, while the questionnaire and means of responding allow the consumer to respond to targeted questions, there is no indication that the user is employing words "having targeted connotative significance to a particular demographic segment." Indeed, the information supplied by the user of Loeb is entirely denotative, providing unambiguously and precisely the occupation, specialty and title of the consumer. § Such language is not in keeping with

the meaning of the claim limitation "connotative," the support for which is provided in paragraphs 17-19 and 37 of the present application. The Loeb reference is silent regarding the extent to which the search language of the consumer (or "user" in the present application) is connotative. As noted in MPEP 2131, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Clearly, Loeb does not disclose the use of connotative language in searching and does not provide sufficient free form input capability to enter search term alternatives other than the denotative term alternatives set forth, for example, in Figure 11C. On this basis, the prima facie case for anticipation of Claims 39 and 42 by the Loeb reference has not been made. It is therefore respectfully submitted that the rejection of Claims 39 and 42 as being anticipated by the Loeb reference is improper. In addition, Claim 42 further recites: "repeating steps (a)-(d) a number of times with at least one different search term in said list, said number being sufficient to cover the desired demographic space." While iterative searching is disclosed, for example, in Figure 10 of the Loeb reference, repeated searching to "cover the desired demographic space" is not disclosed by Loeb, particularly with search terms "having connotative significance to a targeted demographic segment." Accordingly, it is respectfully submitted that the rejection of Claim 42 as being anticipated by the Loeb reference is improper. Finally, as has been noted above, the limitations of Claim 1, cited supra in the present discussion, cannot form a basis for a prima facie case of anticipation in combination with the above matter from the Loeb reference in this section because none of the limitations of Claim 1 is disclosed within the Loeb reference.

- As per Claim 40, Examiner cites the Loeb reference, col. 1, lines 42-53 which reads: "Consumer titles generate revenue from two constituencies, the consumer and the advertiser. Revenue from the consumer is based on subscription fees and newsstand sales. Trade publications, on the other hand, make virtually no revenue from the consumer, i.e., from subscriptions and newsstand sales. Instead, trade magazines make virtually all their revenue from advertising within their pages. Advertisers are willing to pay high fees because trade publications penetrate a very specific and valuable target audience. Advertisers view trade publications as a valuable resource because each trade publication targets a particular audience. Thus, publishers of trade publications are able to..." The above citation describes how publishers derive revenue, however, there is no disclosure of "supplying advertisement information to a user searching for information within a data network..." as recited in Claim 39 (from which claim 40 depends) wherein "said user [searching for information] is an advertiser," as recited in Claim 40. Indeed, the function fulfilled by the advertiser depicted in the above citation is to "pay high fees" to the publisher in exchange for advertising space - not to search for information as recited in Claim 40 and its antecedent, Claim 39. It is therefore respectfully submitted that the indicated citation cannot contribute to a basis for a prima facie case of anticipation of Claim 40 by the Loeb reference because the cited matter does not disclose that the "user" as "advertiser" searches the database. Further, as noted in the discussion regarding Claim 39, supra, none of the limitations of Claim 1 is disclosed by the Loeb reference.
- 10. Examiner cites 35 USC §103(a) as a basis for all obviousness rejections in the present office action.

- 11. Claims 11-38 are rejected under 35USC \$103(a) as being unpatentable over Loeb et al. (US 6,421,652). Rejections will be responded to in Examiner's order.
  - As per Claims 11 and 25, with all of the limitations of Claim 1, discussed supra, Claims 11 and 25 further recite "querying the user to obtain one or more search rules." It is alleged by Examiner that this "corresponds to the questions that to be asked by the controller" disclosed in the Loeb reference. Further, Examiner makes the following points:
    - o "Applicant uses a first and second search engine to refine the search result" while in Figure 10, element 1025-1040, "Loeb discloses a logic for eliminate the result by providing more questions to be asked to the consumer."
    - o "As a result, only a certain number of magazines are available for certain consumer (See Fig. 11B). [C]learly, Loeb discloses a method to refine the search result using a search engine."
    - o "However, Loeb does not clearly disclose two search engines. Loeb refers to another search engine to do the job if the current fails (see Fig 2, element 262, col. 5, lines 16-18, 47-48)." The cited matter of Figure 2, element 262 discloses a "Hot Swap Server," while the cited textual matter of col. 5 lines 16-18 reads: "...application servers 224. Such hot swap servers provide redundancy and allow for continued availability in the event of a component failure." The cited textual matter of col. 5 lines 47-48 reads: "Like the other hot swap servers, the search hot swap server 262 provides redundancy should the search server 260 fail." (emphasis mine)
    - o Based on the above, Examiner alleges that the claimed provision is inherent [in the Loeb disclosure].

o Alternatively, Examiner alleges that, "even if the limitation of the above were not inherent, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use multiple search engines to search for information, because it provides more availability of the system to the user in the searching process."

With respect to the above inherency rejection, the mere fact that the search system provided by the Loeb disclosure asks more questions to refine the search result cannot, by itself, be the equivalent of having a second search engine refine the search after obtaining a "first subset." In addition, the matter in the Loeb reference cited by Examiner to further support inherency discloses a "Hot Swap Server" that "provide[s] redundancy and allow[s] for continued availability in the event of a component failure" and "provides redundancy should the search server 260 fail." These are not second search engines that further refine search results, but rather redundant hardware systems such as servers and other components that are present to take over in the event of a failure of the primary hardware. While such redundancy may be a part of any good business computer system, it cannot contribute to forming a basis for the inherency of two separate search engines in the Loeb reference because redundant hardware addresses a different issue than that addressed by two search engines, namely, failure of the primary hardware. Redundant hardware, as disclosed by Loeb, would have no effect on the search result except in the event of a failure of the primary hardware. Even in that event, the secondary hardware would produce the same result as the primary, had it not failed.

In the alternative, Examiner argues that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to use multiple search engines to search for information, because it provides more availability of the system to the user in the searching process." However, as noted by Examiner, Loeb does not disclose two separate search engines. That being the case, MPEP \$2143 requires that there must be some "suggestion or motivation" to modify the Loeb reference to accommodate two separate search engines. It is respectfully submitted that Examiner has proffered no such suggestion or motivation from the Loeb reference. Further, it is respectfully submitted that the statement "...because it provides more availability of the system to the user in the searching process" does not provide a suggestion or motivation to modify the Loeb reference because, as the Examiner herself notes, the Loeb reference already "discloses a logic for eliminate the result by providing more questions to be asked to the consumer" [using one search engine] which, in itself, would satisfy the need to provide "more availability of the system to the user in the searching process" and accomplish the objectives of the Loeb reference without in any way modifying the reference. Based on the above, neither a prima facie case for anticipation by inherency nor a prima facie case for obviousness in view of the Loeb reference has been supported with respect to the limitation reciting "a first search engine" and "a second search engine" as recited in claims 11 and 25. In addition, to requiring a suggestion or motivation to modify the prior art reference(s), MPEP \$2143 further requires that "the prior art reference (or references when combined) must teach or suggest all the claim limitations." In addition to the arguments above, claim 25

further recites "generating a second list of keywords, said second list comprising keywords or phrases synonymously related to one or more keywords or phrases in said first list; using said second list and a second search engine to query said first subset..." It is respectfully submitted that no such teaching is disclosed in the Loeb reference and Examiner has not alleged obviousness with respect to this claim limitation in view of Loeb. Accordingly, no prima facie case for obviousness or anticipation has been made with respect to Claim 25 because the "all limitations" requirement has not been satisfied. Finally, Examiner cites all of the limitations of Claim 1, as required. However, as has been pointed out, above, none of the limitations of Claim 1, above is disclosed in the Loeb reference. It is, therefore, respectfully submitted that no prima facie case for either anticipation by the Loeb reference or obviousness in view of the Loeb reference has been made with respect to Claims 11 and 25.

- As per Claims 12-24 and 26-38, Examiner rejects based on similar arguments to those above. These will be considered in groups as was done previously.
  - o With respect to Claims 12, 19, 26 and 33 Examiner cites the Loeb reference col. 9 lines 18-19 and 24-26 as being the equivalent of "the user experienced said advertisement previously." The cited matter of lines 18-19 reads: "First, the free trade publication promotion may be advertised on credit card statements. Most consumers who are..." The cited matter of lines 24-26 reads: "...business travelers. In addition to physical statements, the promotion may also be included as part of the credit card or airline website. Consumers who are attracted to the site will..." It is

acknowledged that the user (equivalent to the consumer) experiences the advertisement for the trade publication. Accordingly, with respect to anticipation by Loeb or obviousness in view of Loeb, it is therefore acknowledged that Claims 12, 19, 26 and 33 will stand or fall with the claims from which they depend.

- With respect to Claims 13, 20, 27 and 34, Examiner cites the Loeb reference col. 4 lines 14-16 as being the same as "the data network comprises the internet." The cited matter of col. 4, lines 14-16 reads: "...consumer terminals 120. In one embodiment, the remote consumer terminal 120 can be the consumer's PC or internet access device. In another embodiment, the remote consumer..." It is acknowledged that Loeb discloses the Internet as being a possible data network. Accordingly, with respect to anticipation by Loeb, it is therefore acknowledged that Claims 13, 20, 27 and 34 will stand or fall with the claims from which they depend.
- With respect to Claims 14-16, 21-23, 28-30 and 35-37, Examiner alleges that the disclosure of the Loeb reference in Figure 10 and col. 12, lines 2-6 discloses matter in the Markush language of Claims 14-15, 21-22, 28-29 and 35-36, to wit "the algorithm of said search engine is selected from a group consisting of deductive reasoning, fuzzy logic and abductive reasoning." It is alleged that support for examiner's rejection is found in Figure 10 (not reproduced here) and in the above textual reference which reads "...consumer 125 (step 1010). Questions of the universal questionnaire are generated based on a complex set of algorithms and artificial intelligence. One example is a "virtual form" based on "if-then" logic which focuses certain trade publications to a consumer based

on the answers provided." While the process of Figure 10 and col. 12, lines 2-6 appears to be deterministic, it is unclear to Applicant how the algorithm outlined therein is shown to be "selected from the group consisting of deductive reasoning, fuzzy logic and abductive reasoning." Given the apparently deterministic nature of the algorithm and the apparently complete information set used by the method disclosed by Loeb, one can eliminate fuzzy logic (which provides a simple way to arrive at a definite conclusion based upon vaque, ambiguous, imprecise, noisy, or missing input information) and abductive reasoning (in which hypotheses are formed and evaluated - usually based on incomplete information). However, it not clear how the remaining element of the Markush group, deductive reasoning (which uses a major premise and at least one minor premise to arrive at a definite conclusion), is disclosed by the Loeb reference. Indeed, Loeb discloses a "'virtual form' based on 'if-then' logic which focuses certain trade publications to a consumer based on the answers provided." This does not appear to be "deductive reasoning," as recited in the claims of this section. Nowhere in the Loeb reference are deductive reasoning, fuzzy logic or abductive reasoning disclosed by name. Given that there is no clear identification of any of the members of the Markush group in the above citations, applicant respectfully submits that the prima facie case for anticipation by Loeb of Claims 14-15, 21-22, 28-29 and 35-36 has not been made and that rejection of these claims is improper. Finally, it is respectfully submitted that claims 16, 23, 30 and 37 are not properly rejected because they do not contain the Markush language cited by Examiner's rejection.

- o With respect to Claims 17, 24, 31 and 38, Examiner cites the claim language "said advertisement information comprises contact information" and points out that Figures 5 and 6 and col. 8, lines 45-51 which reads "Publisher database 358 contains information about the trade publication publishers. FIG. 6 illustrates a sample record of publisher database 358. As shown in FIG. 6, publisher database 358 contains publisher records having fields corresponding to, for example, publisher ID, publisher name, publisher contact information and list of magazine ID's published. Like the data in magazine database 356, data..." also provide contact information to the consumer. It is acknowledged that the Lobe reference discloses the release of contact information to the consumer. Accordingly, with respect to anticipation by Loeb, it is therefore acknowledged that Claims 17, 24, 31 and 38 will stand or fall with the claims from which they depend.
  - With respect to Claims 18 and 32, Examiner notes correctly that the "customer" can be identified with the "consumer," cited in Figure 1 of the Loeb reference. Applicant respectfully submits that the rejection of Claims 18 and 32 is improper based on the same argument with respect to the Skillen reference, supra, p. 14, in that Examiner has not made clear whether the rejection is based on obviousness or anticipation and in that it is alleged that the language "user is a customer" is nonfunctional language when, for example, the user will get different search results when acting as a customer or as an advertiser. The language "user is a customer" is, therefore entirely functional. Based on the above, it is submitted

respectfully that Claims 18 and 32 are rejected improperly under this section.

# Conclusion:

Based on the above, it is believed that Claims 1-42 and 44 are in condition for allowance.

Dated this  $19^{\rm th}$  day of December, 2004

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